

## BRENDAN GILL TO CHARM L.A. ON DEC. 13



"Eros in Architecture" is the provocative title for this month's SCC/AIA Chapter meeting which features internationally-known author/critic Brendan Gill on December 13, 8 p.m., at the Los Angeles County Museum of Art's Bing Auditorium. Graced by his justly famous wit and characteristic charm, Mr. Gill's talk will explore erotic imagery in architecture throughout history — in a program which one can safely claim is the first of its kind for the architectural community in Los Angeles. The program is free of charge and open to the public.

Brendan Gill was born in Hartford, Connecticut in 1914, graduated from Yale College in 1936 and since that time has been a contributor to and a member of the staff of the *New Yorker* magazine. For that and other publications he has written short stories, poems, reviews of books, plays and movies, as well as innumerable factual articles. He is the author of several books, including his recent semi-autobiography entitled *Here at the New Yorker*. His latest book, published this year, is *Lindbergh Alone*. He is currently at work on a biography of Stanford White and (with Dudley Whitney) a book of photographs to be entitled *Summer Places*.

Mr. Gill is Chairman of the Board of the Municipal Arts Society, Chairman of the Board of the Landmarks Conservancy of New York, Chairman of the Board of the Institute for Art and Urban Resources, Vice-President of the Film Society of Lincoln Center, a member of the Board of Directors of the Irish-Georgian Society, the Victorian Society, the Preservation League of New York, and Preservation Action. He is a member of the Mayor's Commission for Cultural Affairs of the City of New York.

## TWO DESIGN CONFERENCES, PART ONE

Two recent conferences, held back-to-back in October, have served to highlight the particular predicament of architects in the last quarter of the twentieth century. The thrust of both these conferences, one in Chicago, the other in Washington, D.C., was unmistakable: there is a profound and significant shift across the country away from what we have known as Modern Architecture, at least as the exclusive form of architecture practiced by progressive architects.

The conference in Chicago was organized by Stanley Tigerman under the auspices of the Graham Foundation. Modelled along the lines of the Silver, Gray and White Conference at UCLA three years ago, it featured five architects from New York (the five Whites minus Gwathmey plus Stern), eight Chicago architects (Tigerman's Seven plus Helmut Jahn of C.F. Murphy), and four Californians: William Turnbull, Frank Gehry, Craig Hodgetts and myself. Jim Stirling turned up on the second evening of the conference as an unexpected bonus. Each architect had fifteen minutes to present his most current projects, followed by fifteen minutes of discussion among the participants which included an audience of 200 Chicago architects and students.

There was a surprising unanimity among most of the presenting architects in what I would characterize as a turning away from the aridities of the sanctioned, public and official architecture of our time and a turning toward more private sources of form, accompanied by a reaffirmation of traditional values in architecture and a renewed interest in forms which have long been absent from the architectural repertory. Clearly ornament is no longer a crime; and the names of Soane, Schinkel and Lutyens seem to have replaced those of Corbu, Gropius and Mies.

Stirling showed his most recent projects: on a narrow strip of waste site in Berlin left over by a hideous modern parking structure, infill housing designed to restore continuity and scale to the traditional street; a lovely curving colonnaded walk along a river bank in an old German town whose former unity with the town had been destroyed by a new traffic artery; and a new German museum that was a conscious exercise in the manner of the great nine-

teenth century museums of Schinkel and others. When Charles Jencks reproved him for lapsing from his position of advocacy for advanced technologies into one of historical reminiscence, Stirling reminded him that many of his earliest projects were concerned with vernacular infill housing and that his Churchill College scheme had employed Schinkesque masonry jointing.

The strongest resistance to the work presented came from the Chicago audience whose century-old preference for a more public and pragmatic architecture led them to accuse the presenting architects of highly personal and irrelevant solipsisms. These demurrers found their champion in Helmut Jahn whose designs for C.F. Murphy accurately reflect the best in the corporate official architecture of our times, an attitude to which Peter Eisenman, in a rare philosophic, even mystical mood (he showed no pictures), took strong exception for its anti-humanism.

I will cover the Washington, D.C. AIA Design Conference next month.

Tim Vreeland, AIA

## SCC/AIA SPOTS AIR ON KFAC

Chapter members who keep a button reserved for KFAC-AM or FM on their car radio dials, or who keep the station tuned in at their offices, are aware that a massive SCC/AIA public awareness program — a series of one-minute public service announcements — has been running week-days on the station since June. The series, billed as "A Word on the Environment," is designed to draw attention to the interesting and significant aspects of the Los Angeles area's environment — both built and natural.

Each spot is aired three times daily — morning, noon, and afternoon. With over one hundred spots already aired, and more in production, the SCC/AIA is receiving almost twenty-five minutes a week of free exposure to one of the most educated radio audiences in Southern California. KFAC's Fred Crane, who has recorded and broadcast all of the spots, says that the series has produced an "excellent response," by mail, phone, and personal contact — the best of anything that KFAC is doing in a similar vein. (The station also airs public service spots on the arts, travel, books, wine and food.)

Several Chapter members and workers have been responsible for the production of these spots — working as a group and devoting much time and effort. The program is the brain-child of Jim Stevens, the Chapter's Public Relations Consultant, and Carl Princi, KFAC's Director of Programming. When the idea was proposed to David Martin, he expressed immediate approval since one of his goals as Chapter President has been improved communication between the Chapter and the general public.

SCC/AIA Director Joe Amestoy assumed liaison responsibilities between the Board of Directors and the project, reviewing and approving all program topics as well as generating some of the program's content. Stevens has been the principal writer on the series, but is the first to tell of the "heroic contributions" of Marilyn Fuss of the Chapter office, who has done much of the research and some of the writing. Other chapter members, most notably Fred Lyman, Sam Lunden, and Jock Sewall, have "responded magnificently" through their contributions of ideas, research and writing.

The broadcasts cover a wide range of topics: buildings — modern, historic modern, and historic-cultural; planning and urban design issues; and special interest subjects such as sculpture, interiors and landscape. Recent broadcasts have begun to consider issues and topics related to the natural environment, such as climate, land, the politics of the environment, and employment opportunities.

At this time, the Chapter is seeking responses (both positive and negative) and input from its membership. Chapter members are urged to submit ideas, or even written copy (about 200 words) for future broadcasts. Call the Chapter office to learn whether your favorite subject has already been covered.

Gilbert L. Smith

## JONES VIEWS ARCHITECTURE AND EDUCATION

A. Quincy Jones' Chapter meeting talk October 11 offered encouragement to those inclined to believe that to practice architecture these days is to have a tiger by the tail. "We should all be optimistic and enthusiastic about our profession," he told an audience of about 500 at the Los Angeles County Museum of Art.

Jones, now 64, heads an office that has been continuously active since opening 32 years ago, and currently has a staff of 25 handling over 15 jobs. He has been Dean of the School of Architecture and Fine Arts, USC, since 1975. Over the years, his firm pioneered in-

novative use of materials and systems — and new kinds of architect-client relationships.

Such a career gives special credibility to the architect's October remarks, "Architecture, the Professional, the Student and Education": "It is my conviction that the architect is the 'generalist' who acts as the 'lens' that focuses the efforts, the output, and the conclusions of...individuals (such as the scientist, developer, realtor, politician) in a manner that establishes the starting point for 'total design.' The architect must understand the importance of relating each piece to the whole to achieve a delightful environment."

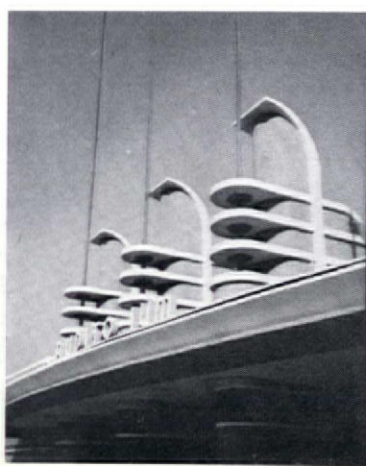
But to realize such a role, the architect needs an informed, aware client — and public. "Until we can increase awareness of the importance of a good environment and how it affects the productivity of our entire society, we cannot measure up to the challenge we face today."

Education is the key. "Preschool education is crucial because these are the formative years that affect the way children respond to their surroundings."

For now, though, a more realistic starting point is the university, where the architect can not only work with student architects but communicate with "present and future decision-makers." If such dialogue is successful, "the decision-makers would know and appreciate the role and contribution of the architect in the development of the places that affect our lives."

"Young architects and students probably felt especially good about this talk," observed Susan Peterson, Co-Chairperson of SCC/AIA Associates. "It's nice to know that one can maintain a smiling attitude despite everything one has to put up with to get something built."

Anne Luise Buerger



## PAN PACIFIC PRESERVATION OPPORTUNITY?

Wurdeman and Beckett's 1935 Streamline masterpiece, the Pan Pacific Auditorium, is dangerously close to demolition. There is, however, a very real possibility that it could, at least in part, be preserved. A report by UCLA architectural historian Thomas S. Hines, commissioned by the Los Angeles County Department of Parks and Recreation (which proposes a much-needed park for the site) recommends retention of the Western-most, image-giving portion of the building to house whatever service functions the park needs to provide.

Public support for preservation has always been a problem in Los Angeles. Until recently the city has taken so much abuse from critics, historians, planners and satirical novelists that many Angelenos refuse to believe that there's anything out there worth preserving. Too, the city's size has worked against preservation. Los Angeles has always seemed inexhaustible as the sea once did: if a few things are torn down here or there, there's always more where that came from. And it's hard to watch-dog a place so large: the Cultural Heritage Board can't be everywhere at once.

Rarely does a situation arise which effectively unites a significant portion of the community. If the Dodge house is one such example which ended tragically, Watts Towers and the Central Library show that public commitment and action can result in the reintegration of important pieces of our cultural heritage into our present and our future.

It is this process of reintegration which makes Hines' proposal so attractive to the preservationist and, one hopes, to the Department of Parks and Recreation. This is not an attempt to preserve a building for which where is no real use, but a plan to retain the architecturally significant portion of the structure and adapt it to a reasonable, practical use which would return the building to the everyday experience of the inhabitants of the city.

Los Angeles possesses what is arguably the finest collection of Streamline Moderne buildings in the country. Their importance and their precarious survival is indicated by a project to document 23 Moderne buildings (Zig-zag and Streamline) for the Historic American Buildings Survey. In the four years since

the project was begun one of the buildings has been demolished, three remodeled beyond recognition, and several others altered to varying degrees. The most recent, and one of the most important buildings from the HABS project to be threatened is the Pan Pacific. It is a major monument of a major Los Angeles design mode, and concern for its retention should be brought to the attention of County officials, in particular Supervisor Ed Edelman, and the County Department of Parks and Recreation.

John Beach

## UCLA/SAUP DEGREE ACCREDITED

The first professional degree program in architecture of the UCLA School of Architecture and Urban Planning has been accredited by the National Architectural Accrediting Board. The newly accredited program is at the graduate level, open to students with a bachelor's degree in any field and leads to the degree of Master of Architecture.

In addition to this first professional degree, the School presently offers two programs in Advanced Graduate Studies in Architecture. The first is open to students who already have a B. Arch. It has a professional orientation and leads to the degree Master of Architecture. The second is directed towards training for research and teaching and leads to a Master of Arts in Architecture and Urban Planning. It is open to students with a B.A. or B.S. in a related field.

## BOOK REVIEW:

By Jonathan Kirsch

*A Guide to Architecture in Los Angeles & Southern California*  
By David Gebhard and Robert Winter,  
Peregrine Smith, Inc., 728 pp.,  
softbound, \$11.95.

The tantalizing wait is over. After nearly thirteen years of rumor and speculation among their readers, David Gebhard and Robert Winter have finally delivered themselves of a vastly expanded and updated version of their 1965 handbook, *A Guide to Architecture in Los Angeles & Southern California*. The new edition, published in a handsome *Guide Michelin* format by Peregrine Smith, is already an indispensable resource for architects, historians, students and aficionados of architecture.

As the authors admit in their preface to the new *Guide*, the original 1965 version was a modestly-conceived effort with a conscious preference for twentieth century buildings. But there's no mistaking the grand ambitions of the new *Guide*; it's an exhaustive, all-encompassing work that seeks to capture both the sweep and the detail of the world's most noisily-debated region. An author with less wit, authority and style than Gebhard and Winter might have stumbled badly — but the new *Guide* is a triumph of scholarship and self-confidence.

Gebhard and Winter mapped off an immense stretch of the state — from San Simeon, Fresno and Bishop along the northern fringes of Southern California to the Mexican border on the south — and then identified and described several thousand noteworthy structures: churches and movie theaters, schools and stables, gardens and freeways, office towers and hot dog stands, an eclectic grab-bag whose sheer diversity of style and function says something profound about our architecture.

All of these wildly disparate elements are neatly ordered and bound into a comprehensive system of locator maps — a total of 120 maps and 600 photographs spread over 728 pages of listings, neighborhood descriptions, and explanatory essays. The whole package fits neatly in the hand or the glove compartment, making the *Guide* a perfect companion for the sightseer as well as the student and the scholar. In fact, the *Guide* is assured of a long and vital life precisely because it is offered in such a practical package; the book simply insists on being used.

But the packaging is not flawless. The locator maps are executed attractively, but some of them fail to orient even a former resident of the areas they depict. The neighborhood boundaries are often illogical and misleading; my

(continued on Perspective page)

## DECEMBER 1977

### Inside:

Special Energy Spread, with contributions by Richard Schoen, Dion Neutra, Terry Rainey, Michael O'Sullivan, Michael E. Barsocchi and David Martin.

Kenneth Dillon on Thornton Abell  
Frederic P. Lyman on Wooden Houses, Part I

### Calendar:

December 13: Brendan Gill, of the *New Yorker*, on "Eros in Architecture," Chapter meeting, Bing Auditorium, 8 p.m.



# THORNTON M. ABELL

Thornton M. Abell, FAIA, President-Elect of the Southern California Chapter/AIA for 1978, has been a participant in the contemporary movement in modern architecture since erecting his own residence in 1937. His work has been published in various books and periodicals such as *Arts & Architecture*. He has also been the recipient of numerous prestigious architectural awards.

After studying at the University of Michigan, he emigrated to UC Berkeley, and later, to USC. At Michigan he studied with Knute Lindberg Holme of the Bauhaus, whom Abell regards as his mentor for basic design. The Bauhaus traditions of simplicity and directness are everywhere evident in his work. Abell taught Interior Design at Chouinard Art Institute from 1950 to 1952, Architecture at USC from 1952 to 1961 and was Visiting Critic for 5th Year Design at USC from 1963 to 1965.

Characteristic of Abell's work is the closed facade to public streets, creating a maximum of privacy, and a completely open facade to interior private spaces. The spaces, composed of courts and terraces, are studies in a geometry that shapes and relates interior and exterior spaces to themselves and one another in terms of use and volume. The exterior spaces are actually a series of exterior rooms, defined by trees or other plant materials, elevation changes and/or trellises and space frames. Such definition creates various open and closed, sunny or shaded areas.

Material uses are simple and direct, as in *Arts & Architecture* Case Study House #7: "A trellis above the indented entry court, and the fascia along the eaves of the bedroom wing, give continuity and variety to the broad horizontal surfaces established, while the parallel lines on different planes bring depth to the facade. Abell borrowed the advancing and receding parallel lines, composed of different textures, for his own office." Talking about the use of materials and time, Abell has said, "Products are usually put on the market before they are proved out, and it is up to the architect to test what industry develops — and the client becomes a collaborator in the experiments. The problem for the architect is to walk a tight rope between experimentation and prudence."

The broad planes and flat surfaces are contrasted with the characteristic "skinny detailing" of the early houses of international modern architecture, a connecting link, according to Reyner Banham, between the "exile generation (Neutra and Schindler) and the bright young Americans (like Charles Eames) who built the steel and glass houses of the fifties."

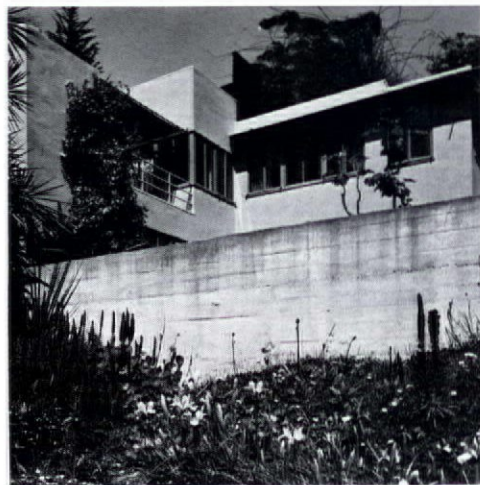
The heavy, solid blocks of the street facades close out the exterior world and behind these walls is created a private space that belongs only to the building. A thin membrane of glass with mullions reduced to lines provides the least possible division between the interior and the exterior private spaces.

Abell's buildings respond to solar orientation. Openings are protected from the sun by overhangs and walls which are also used to create private spaces. Everything is worked out. Geometry prevails — the placement of walls, closed panels, and openings are all positioned in the logical development of carefully disciplined schemes. But positions are not arbitrary. They relate to uses, site, the sun. Nothing is "stuck on" — there is no pastiche. The romance of the final form is the logical end of a rational concept. The result is holistic, not a concentration on a part.



As an avocation, Abell grows and hybridizes irises. A colorful and rich complement to his architecture.

**Kenneth Dillon, AIA**



ABELL HOUSE, 1937



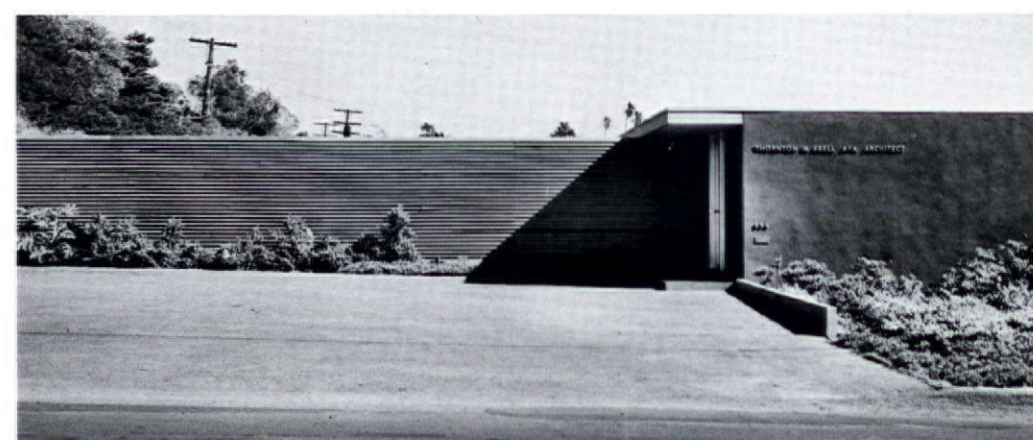
CASE STUDY HOUSE #7, 1948 - AIA Award



BECK HOUSE, 1951



MODEL HOUSE, CONSTRUCTION INDUSTRY EXPOSITION, 1952 - AIA Award

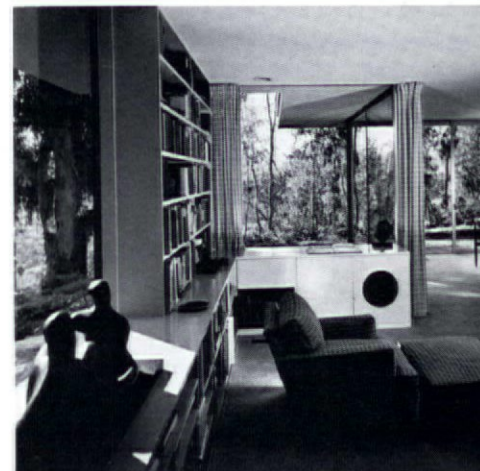


ABELL OFFICE, 1954 - AIA Award



ULLMAN HOUSE, 1956

"Each species wants to survive. They try to modify their environment to help their survival. This is sometimes hard on other species. Probably the only reason Man has survived over the years, is his adaptability to changes in his environment that he can't control, and his ability to change it to help his survival."



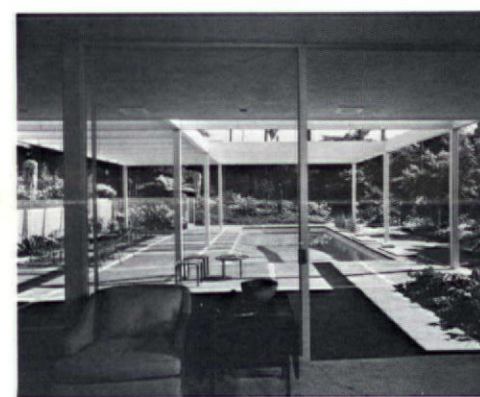
ULLMAN HOUSE, 1956



RICH HOUSE, 1968



RICH HOUSE, 1968

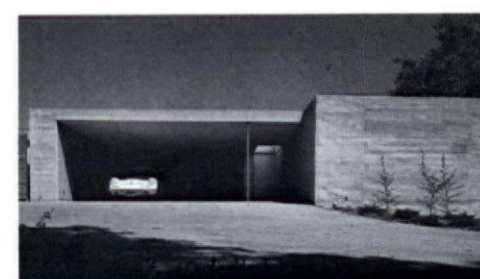


NEWFIELD HOUSE, 1961

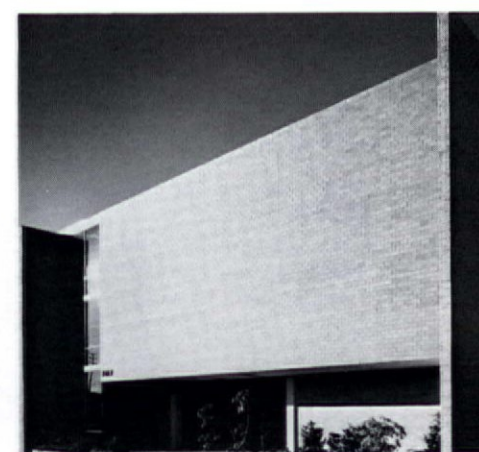


MASLON HOUSE, 1970

"Ecology — a wonderful word. It makes you feel so knowledgeable to say it — you almost don't need to say anything else. It isn't a *thing*, it is a relationship. An interdependence of animal and plant species, and it is *constantly* changing."



LEBRUN HOUSE & STUDIO, 1964 - AIA Award



SISKIN OFFICE BUILDING, 1973

Credits:  
Quotations regarding the Case Study House from *Modern California Houses* by Esther McCoy;  
regarding connections from Los Angeles: *The Architecture of Four Ecologies* by Reyner Banham;  
direct from talks by and conversations with Mr. Abell.

Photos: All Julius Shulman, except: TMA House, Thomas Young; CSA House, Herman Wall; Rich House, Richard Fish; Siskin Building, Allen Dean Walker.



ENERGY: AN IMPORTANT FRONTIER

L.A. Architect has matured. It has become an increasingly effective communication tool and has continued its excellence in presentation. It has become a place to make a statement.

This issue makes a statement, by members, for all members of our Chapter on one of the most important frontiers of this decade in the field of architecture. Our Chapter and L.A. Architect are committed to encouraging the flow of ideas and information on energy conservation. This four-page spread features articles on energy and its implications for architecture — the first articles of a series that we anticipate will continue for several years to come.

Initial and actual results for many in our profession indicate that there is a phenomenal savings in the use of energy in buildings when we design to these newly emphasized criteria. Many of us who are just starting to grapple with the Title 24 requirements have been amazed at the results. The whole movement to conserve energy in our built environment has had a great impact — and we are just at the beginning.

I believe that we are practicing in one of the most exciting periods of architecture in our history. There is an important opportunity available to us. Those of us who take advantage of this opportunity will be rewarded, not only by the obvious payoff of reduction in the use of our limited energy resources, but by the establishment and the pioneering of a significant movement in the history of architecture.

David Martin, President  
Southern California Chapter  
American Institute of Architects

ARCHITECTS AND ENERGY-CONSERVING DESIGN: SOME OBSERVATIONS

by Richard Schoen, AIA, SAUP/UCLA, Solar Resources, Inc.

As architects, we have long held that our profession “leads” society’s values and “guides” its changing value systems. In fact, we have, as often as not, followed and even mirrored them. Our society has been a cheap energy-ethic society. Our buildings have expressed that ethic in all of its economic, technical, and aesthetic ramifications.

But the central issue here is not what is past but what confronts us now and how we, as designers, professionals, and concerned citizens of the planet, respond to demands for resource and materials conservation. The “answer” exhibits anything but consensus: the present picture is murky and in flux — and some component elements of that response as currently expressed may be somewhat surprising.

What follows is a collection of observations drawn from: researching how change takes place, or fails to, in the design professions and the industries they serve, teaching Energy Conserving Design/Management-Solar (EDC/M-Solar), Design, and Professional Practice and Ethics; and more recently, re-entering practice to practice what I have been preaching — to take the risks that we have been telling others to take and to seek the opportunities we claim are there.

**Resource/Materials Conservation in the Built Environment**

The issue at hand is resource and materials conservation in the conception, design, construction, and operation of the built environment — a sector consuming fully one-third of the U.S. energy budget annually, perhaps as much as 30-40% of which is avoidable waste. Within that issue is the objective of energy-conserving design, both active and passive, one approach of which is the application of solar technology.

Thus, solar must compete as a means of energy conservation and not as an excuse to build energy-wasteful buildings because the source is supposedly free. If other active and/or passive ECD/M technologies prove more cost and energy effective, thereby making solar less attractive, then the more efficient technology must have its day. Solar’s time will come — and faster if not overpromised.

In returning to practice in a way that I

hoped would help me address these issues, I initially resisted the name of our firm picked by my colleagues and partners — Solar Resources Incorporated — as being entirely too limiting. But it has turned out to be quite useful as an attention-getting device with our clients when we explained: “In spite of our name, we are not selling solar energy. We are interested in minimizing energy and resources consumption in buildings and that will be our approach to your project. If we can achieve those objectives in a more energy/cost effective mode than solar, we will recommend against the latter. If we do incorporate solar technology in the design of the project, we insist that neither of us makes ridiculous claims, well-intended or otherwise, as to what your solar system can do.”

In our modest activities thus far, solar has been a toss-up, especially for space heating, competing with natural gas in the mild Southern California climate. Similarly, in giving invited testimony on proposed solar legislation before Congress, the State Legislature, County Supervisors, and City bodies, we have usually found ourselves advising against the proposed legislation as being ill-advised or even potentially destructive of the objective we all seek: the development of a wide variety of appropriate, alternative, and renewable non-fossil energy technologies including, when and where appropriate, solar energy applications.

**The Spectrum of the Architect’s Response to ECD/M-Solar Concerns**

In some ways, the architect’s response to these issues again mirrors that of society, but there are unique elements, and all aspects are conditioned by his or her role as a designer. I would characterize those responses as follows:

1. There is no crisis. This country has plenty of fuel and is being hoaxed by the oil and utility companies. I can continue to design and build as I please.
2. There may or may not be a problem. I am trying to survive and can’t really be bothered by it. If there is a problem, just give me another code and I’ll deal with it.
3. This technology has interesting design implications. I’ll try it out — but don’t bother me with how it works or whether it’s appropriate on my project.
4. Where can I buy it? We’ll slap it on.
5. There is an important issue here — one, when combined with issues that we architects traditionally face, has the potential for contributing to new architectural form as well as creating an architecture responsive to a serious and possibly long-lasting issue of societal concern.
6. The architectural profession has been busy resurrecting the Masters and otherwise contemplating its own navel for the past two decades. A phenomenal new challenge has arisen which will provide us with the means to a new architecture.
7. Armageddon is upon us. You must change your life style and this new architecture will be integral with it. The alternative is disaster.
8. Spaceship earth has finite resources. We in this country consume far too much of the world’s resources. Architecture must change, appropriate, participatory technology is essential, regionalism returns, and a new building ethic arises.

The preceding are not tongue-in-cheek characterizations. They typify the range of attitudes we have met not only among architects, but many others in the building industry with whom we have worked closely over the past four years.

Let this appear to be an excessively pessimistic perception of our profession, it must also be said that there are increasing numbers of new as well as established design firms that are expanding their own resources in energy-conserving design — and are taking the considerably increased risk of incorporating many of the new technologies in their projects.

**Negative Backlash, Benign Climates, and the New Civil War**

If all the preceding were not enough, there appears to be a moderate but potentially significant negative response setting in within the profession and its professional schools — even before the concept of ECD/M-Solar applications to buildings can be broadly and fairly applied.

One aspect of this is that the whole issue is said to be moot in Southern California. It is claimed that our moderate climate makes any conservation measures not worth what we have to “give up” in design terms — nor are they cost effective. In part, this belief is reflected in the current version of the California Residential Energy Insulation Standards, which minimizes the impact of some of its regulations and eliminates others entirely from those low annual degree-day areas in the State, including Southern California. Even though the new version of the Code will tighten this

requirement, it is nonetheless true that many of the ballyhooed ECD/M options would not be cost-effective (e.g., burying the building underground). However, other are — even here — and will show considerable energy savings overall.

The point is, are we to avoid tightening up our product in this area while other parts of the nation cannot get enough natural gas and heating oil to operate their homes, schools, and commercial and industrial facilities? The various fossil fuels have always been available on a regional basis, but the public has not known that. It is becoming aware of this now, however, and a new regional factionalism may arise.

**Architect-Engineer Relationships — The Building Team**

What will be the impact upon design? Until now, the architect often conceived the project and then “delivered” it to “his” engineer to “hold it up” or otherwise mechanically equip it. All other ramifications aside for the moment, this linear process will become increasingly untenable. The inclusive and all-pervasive nature of energy use in buildings suggests that conceptualization must take place jointly by architect and engineer at the earliest moment. But in order for this to take place, the traditional, sometimes antagonistic attitudes of each towards the other must be put aside.

Architects must come to better understand the workings of those systems which heat, cool, power, and light the buildings they design and, hopefully, see new design potential in the expression thereof. Engineers must come to understand more about architecture and some of the less obvious, or immediately “functional,” aspects of design. They must throw off their beaten-down status created by years of working in a subservient role to the architect — so that when asked to enter into the process earlier, they realize that it is not only so they can “get enough space for their ducts” but that they participate jointly and equally in conceptualizing what systems shall be used. Together, both professions must come to understand the analytic processes which precede the design synthesis.

Both architect and engineer must be called into the development process at an earlier stage than is presently traditionally the case. They must be asked to participate in site selection, in determining best use of site, including whether or not the project should be built at all (a stress-inducing issue particularly confronted by practitioners in Malibu). This is especially true when solar technology is contemplated, since the collector and storage components are easily “bigger than a bread box,” and the decision to apply them has serious implications for site selection, project configuration and orientation, and adjacent structures and plant materials.

Obviously, attitudes such as those described will not be easily changed. Of equal difficulty is the recognition that the old truism — “the best mechanical system is the least seen” — may no longer be valid, if it ever was. For example, we often persist in “expressing structure” which comprises, perhaps 15% of the cost of construction while “hiding” environmental controls and mechanical equipment — which may comprise 40-60% of the building costs.

In fact, as our own experience has shown, unless we can get across the notion that, for example, solar collectors must be considered architectural components rather than mechanical equipment, we will have to fight their being banned from the roofs in every community where we work.

**Being Paid to “Do Good” — A New Challenge for the Profession**

I believe that we are increasingly approaching the day that we as architects will no longer be able to blame others for the creation of a shoddy or ill-conceived buildings. Increasingly, environmental and community approval requirements will become so strict that the builder will have to commission designers who can respond to community concerns with projects that will last and be environmentally sensitive. We will be expected to know how to build well, and effectively, because our clients will not otherwise be able to build at all.

At one of our local architectural colloquia held at SCI-ARC last year, Ray Kappe observed that while he hoped this would indeed become the case, he had yet to see it happen, at least in terms of his then current clients. Our own firm has also been only modestly successful in this regard thus far. However, I believe my prediction will eventually prove valid. Therefore, I often observe to my class in Professional Practice and Ethics that when they reach the height of their professional maturity, they will be paid to “do good.”

WIND POWER VIA “WECS”

by Terry Rainey

WECS — from Wind Energy Conversion Systems — commonly referred to as “windmills,” is a term being used with increasing frequency by government, industry, and consumers. WECS used as a primary or secondary source of electrical energy in a residence is not a new idea. However, advances in aeronautical engineering and electronics are aiding the development of more efficient Wind Energy Systems to meet the massive electrical needs that housing and industry require today. Most advocates of WECS do not even suggest that wind energy systems can replace all of the demands placed on electricity today. However, with a combination of energy conservation, energy-efficient appliances, climatically responsive architectural forms, and wind, a WECS can contribute significantly to decreasing energy costs and to providing a non-polluting renewable source of energy.

**Wind Speed Analysis**

In order to determine the viability of a WECS for use in residential, business, or industrial applications, an accurate wind analysis is essential. Wind speed and duration are two of the most important factors in determining the electrical output of a WECS. It is generally recommended that data collection take place on site for up to a year in order to take seasonal variations into account. For an accurate assessment of potential power from a WECS it is also recommended not to utilize airport or other weather station wind data unless the site is immediately adjacent. Variations in topography between a weather station and the site can make a significant difference in the wind that the site actually gets. An anemometer with chart recorder is often used to evaluate on-site conditions along with personal observations and first-hand knowledge of wind conditions by long-term residents.

Wind speeds necessary for electrical power generally range from 7 to 10 m.p.h. for 12 to 20 foot diameter wind machines. These speeds provide something similar to a “trickle charge.” Rated Wind Speed — the m.p.h. a wind machine requires for full output — varies from 20 to 30 m.p.h., depending on the machine. As a rule, the West Coast, the Great Plains, the Midwest and the Northeast have the most suitable winds for WECS. This shouldn’t be taken literally to mean the entire Los Angeles Basin; each site has its own peculiar wind pattern. For example, although not on the coast, the desert regions east and west of Palm Springs have tremendous potential for WECS.

Once a site’s wind conditions are established as adequate, selection of a WECS is determined by energy demand and days of no-wind...not by a structure’s square footage. If a WECS is going to be used to its maximum potential, this analysis is necessary for two reasons: 1) to determine the size of the storage system (for no-wind days when power is needed), and 2) to determine cost efficiency/payback.

**Two Common WECS Applications**

At the present time, there are two common applications of WECS: remote generation and co-generation. Remote generation has been and promises to remain a significant solution to the problem of providing electricity in areas where power lines are uneconomical...and where there is wind. Remote generation has long been used on farms and more recently on remote landing strips, offshore oil production platforms, remote radio facilities, and rural homes, for example. These applications are unique in their use of long-life, wet-cell batteries for electricity storage.

One of the more efficient WECS applications is co-generation: this application is unique in its link-up to an existing utility company for storage of electricity. The California Public Utilities Commission recently ordered Southern California Edison to provide a rate schedule for those individuals who wish to use Edison as a storage system for their WECS. As a result, Domestic-Parallel Generation: Experimental Schedule D-PG became effective September 1, 1977. When a WECS produces electricity that is not immediately needed, it is fed into the utility’s system through a Synchronous Inverter that also meters the amount. On days of no-wind or when residential demand exceeds what the WECS is producing, power from the utility comes in, signalled by the Synchronous Inverter, to make up the difference. Credit, often minimal, is given by a utility company to the homeowner for the excess energy fed into the utility grid by the WECS. During a brown-out or black-out, a secondary storage system

(batteries) can be called upon electronically to make up the difference. An example of this application is a new residence in Oceanside, California, whose WECS is currently operating under remote generation and will be hooked up with Edison late in 1978.

**Federal Support for Wind Energy Research**

The Federal Government has channeled the majority of its Wind Energy funds to large WECS — in contrast to the small WECS that have been outlined in this article. Since 1973, the Federal Wind Energy budget has grown from one million to twenty million dollars. Administered by the Energy Research and Development Administration (ERDA), the major objectives of its program are:

- Develop wind turbine generators that can feed 60 Hz ac power directly into utility high power lines.
- Demonstrate to utilities that the machines are practical and cost effective.
- Encourage research on energy conversion systems that extract more power from the wind.

A 100 Kw wind machine built and operated by NASA for ERDA has been generating 60 Hz ac power from the wind since September 1975. Kaman Aerospace Corporation and General Electric Company have developed preliminary designs for 180 and 190 foot-diameter wind machines. ERDA contracted with Rockwell International to set up a test facility in Colorado to install, maintain, and monitor small-scale domestic and international WECS. The results of the testing and operation of these machines are to be published and disseminated to the public through routine government document channels.

The process described above for selection and operation of a WECS for residential use is not meant to sound simple, even though small WECS are relatively uncomplicated mechanically and relatively maintenance-free. At the present time, certain drawbacks do exist that may discourage those who seek a “sure thing.” Reasons: Cost — Wind Electric Generators cost in the neighborhood of \$1/watt, and installation can cost the same amount again. Codes — WECS are new to Building, Electrical, and Safety Codes, although initial reactions from Codes people are favorable. Utility Companies — although they regard co-generation as a great inconvenience, the public and the courts have found a way that the “system” can work in favor of the consumer.

**WECS Information Sources:**  
Kedco, Inc., Inglewood, CA  
(213) 776-6636  
American Wind Energy Association,  
54468 CR 31, Bristol, IN 46507.  
Publishes *Wind Power Digest*.

**STATE ENERGY DESIGN COMPETITION**

A statewide architectural competition — sponsored jointly by the State Energy Commission and the Office of the State Architect — to select the energy-conserving design for a new \$15 million State office building has been won by Benham-Blair & Affiliates of California, Inc., a Los Angeles architectural firm.

In announcing the awards, State Architect Sim Van der Ryn said, “This competition is a significant example of how state government can work creatively with California’s architects, engineers and construction industries to bring about a new architecture built on creative connection between new engineering technology, common sense, concern for people and the environment. We are committed to rebuilding the new capitol area and intend to make it a showcase of California’s leadership in solar design and energy conservation.”

A complete listing of the competition awards is as follows:

**First Award**  
Benham-Blair & Affiliates of California, Inc., Los Angeles

**Second Award**  
Don Logan, Berkeley

**Third Award**  
Sam Davis, Berkeley

**Awards of Merit**  
Douglas Stenhouse  
Energy Management Consultants, Inc., Los Angeles  
Gerald Dommer, Berkeley  
Marvin Buchanan, San Francisco  
Horin Achanan

**Reid & Tarics Associates, San Francisco**  
Thom Mayne & Mike Rotondi,  
Morphosis, Los Angeles  
Pflueger Architects, San Francisco

**Robert Swatt/Bernard Stein, Architects/Planners, Oakland**  
Christie Coffin, Berkeley



# RESIDENTIAL ENERGY

## PASSIVE SYSTEMS: Some local built examples

### Preface

Passive energy design is a design response to the increasingly prohibitive cost of non-renewable sources of energy. It is design that responds to the environment the way design did before complex heating and cooling systems evolved. Although current HVAC systems deliver exact heating and cooling needs, they also exact a toll on our finite sources of energy. Passive energy design is by no means limited to residential applications.

The benign climate of Southern California makes fewer demands on the climatic response of a structure than on those structures in regions of greater temperature extremes. The intent of Greene and Greene is unmistakable in this regard: witness the long overhangs and sleeping porches — this is climatic response. Responding to climatic conditions by automatically specifying large HVAC systems may not only increase the client's construction costs but will also increase his long-term costs. Passive energy design can reduce initial and long-term costs to the client.

The four designs illustrated here all rely on an active, non-solar system to some extent for those days when solar radiation is inadequate.

Michael O'Sullivan, AIA  
Terry Rainey

### Barczewski House

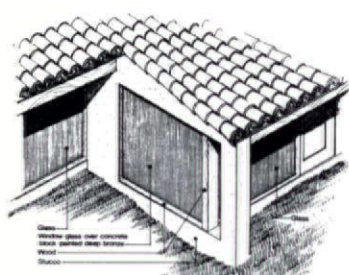
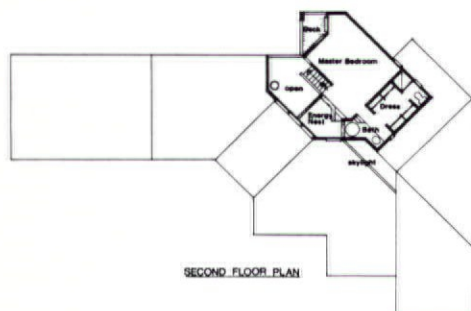
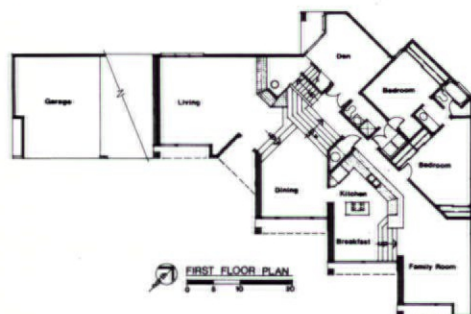
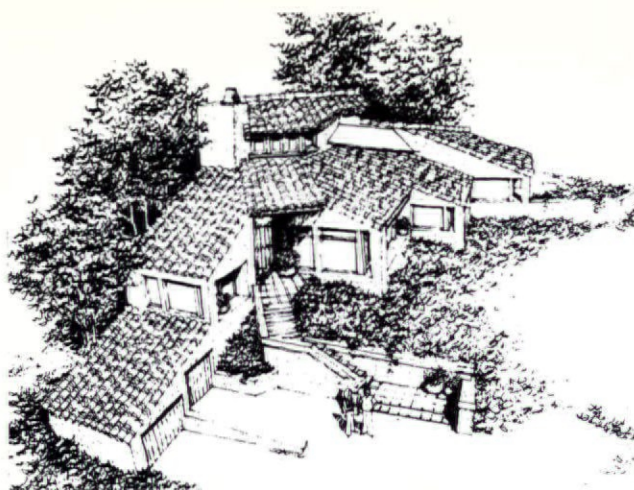
Palos Verdes Estates, CA

Gluth & Quigley Architecture, AIA, San Diego  
Under construction

This four-bedroom speculation house incorporates ecological design in the context of traditional building techniques.

The bulk of the space heating will be accomplished passively by using the house itself as a solar collector through an "Energy Sawtooth" concept. The "Sawtooth" architecturally integrates calculated overhangs, kinetic insulation, floorslab heat storage, and heat lag walls. The majority of the glass in the house faces southeast to take advantage of the warming morning sun. All windows will be double glazed and have insulated shutters to decrease night-time heat losses. The hot afternoon sun will be captured and saved for night-time reradiation by masonry heat lag walls. Further passive heating benefits will be gained from the aquatic "Energy Nest" window seat in the master bedroom.

In addition to the space heating effects of the Sawtooth, an "off the shelf" active solar system will provide for domestic hot water needs. It will require only about fifty square feet of flat plate collectors which will be tucked into the roof forms like a skylight. Cooling will be accomplished naturally through architectural shapes and the stack effect. The house will use water conserving fixtures and fittings throughout. The fireplace (which is usually 90% inefficient) will become a viable heating source by introducing an exterior combustion air pipe and exposing the two-story flue on the interior. The fireplace is placed on the interior of the structure to avoid heat loss through exterior walls. It is surrounded by solid masonry to increase the thermal mass of the house.



Solar Corner Detail

L.A. ARCHITECT December 1977

### Greenstein Residence

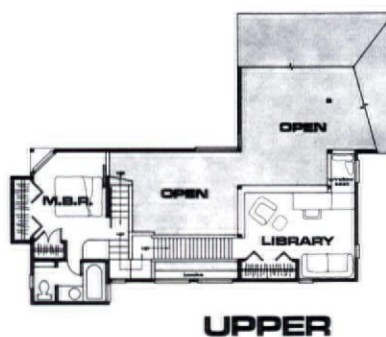
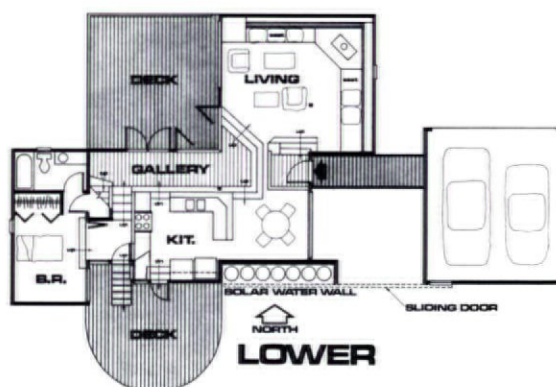
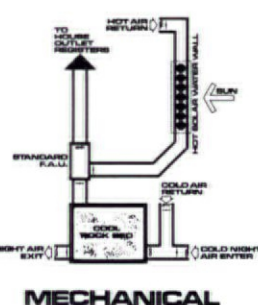
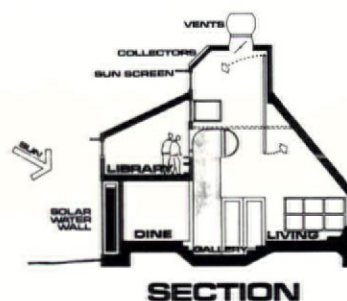
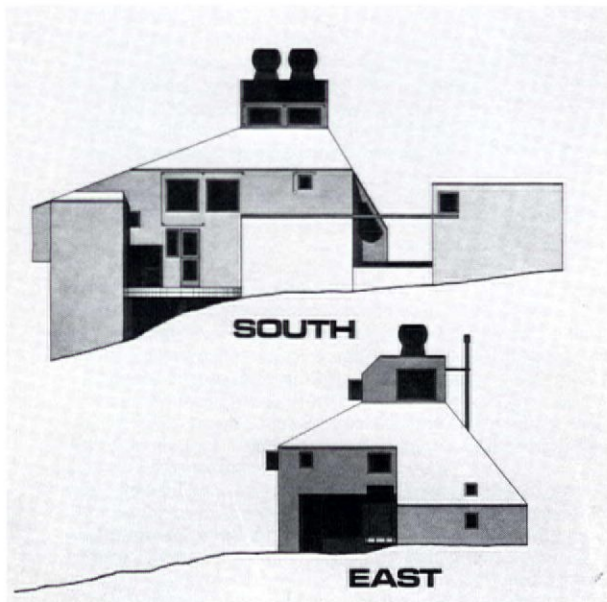
Woodland Hills, CA

Gluth & Quigley Architecture, AIA, San Diego  
Under construction

This residence features a number of innovative design ideas in combining the concept of spatial volume manipulation through "kinetic sculpture" with the creative use of reflective (south/west walls) and absorptive (north/east walls) exterior paint.

Black water-filled columns sit behind glass inside a well-insulated south wall "bin." The heat trapped by day is then contained by sliding an insulated "barn door" in front of the glass at night, and will be drawn into the house when needed via the fan/ducting of the gas back-up system.

For cooling, night air will be passed through a large rock bin, and a very attractive belvedere shall help remove any excess heat from the living area below. When changing back to the heating mode the belvedere can be closed off by a moveable insulating partition, thus substantially reducing heating in the area.



### Relis Residence

Santa Barbara, CA

Lawrence E. Thompson, Architect, Santa Barbara  
Completion Date: 1977

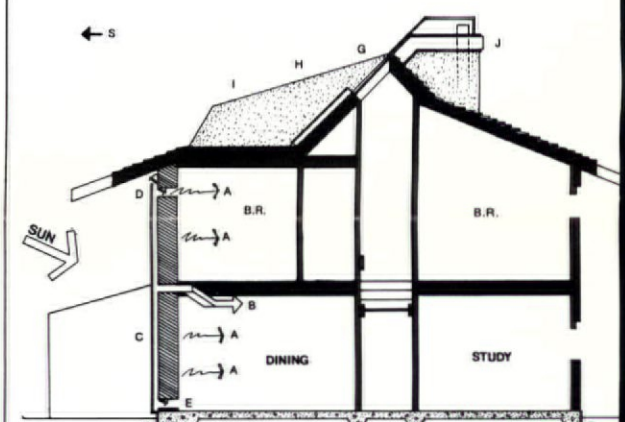
This home was conceived as a total energy conservation system which can be built for modest cost. It utilizes an adaptation of the Trombe Wall System, developed in the early '50s by Frenchman Dr. Felix Trombe. The Trombe wall is a vertical masonry wall which, as a thermal mass, releases heat at night that it gained by direct solar radiation during the day. Exterior glazing and a series of vents create a channel of air that can be directed across the wall and into a structure for heating. In warm regions, this channel of heated air (created between glazing and masonry) can siphon cool air through a structure from the cooler north elevation — as the Relis house does.

The advantages include the elimination of costly heat storage systems to retain heat during cloudy weather. (Heat circulating fireplaces and small unit heaters were planned as backup.) In addition, the empty cavity between the glazing and surface of the wall allows for urethane beads to be blown into this space by a vacuum pump at night, thus insulating the wall as a potent heat radiator. This feature has not been included in the project at this time, but the house may be retrofitted at a later date using attic space for insulation storage.

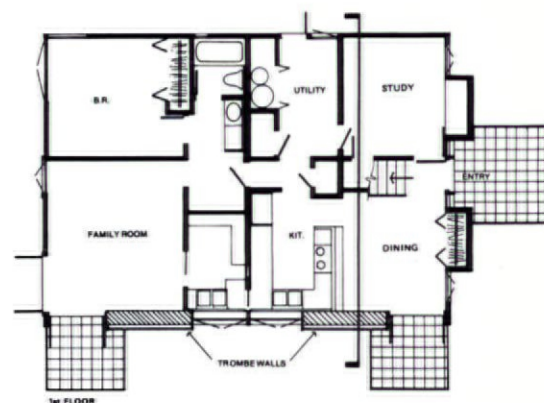
The building form is compact for minimal surface area in relation to building volume. The value of glass was enhanced by horizontal placement and corner locations to create a feeling of spaciousness. Title 25 requirements were closely followed. The use of north-facing windows was minimized, despite the prime mountain views. Trees have been planted to frame views and to lower wind velocities, thereby reducing heat loss.

Although calculations indicated no need for supplemental air conditioning, the County Building Department required installation of a conventional heating system, reduced, however, 25% below normal requirements. Because of this and other factors, solar-heated air was combined with conventional system return air via forced-air unit blowers for distribution to rooms not contiguous with the collectors — an important modification of the still-experimental Trombe System.

The cost of the solar space and water heating, including the sixteen-inch concrete south wall, was \$4,500. The total project cost was under \$30 per square foot.



- LEGEND
- A - Radiant heat (maximum at midnight)
  - B - Return air duct off Trombe Wall to fan blower for distribution to north-facing rooms
  - C - Double glazing
  - D - Damper for thermal siphon
  - E - Return air
  - F - Perimeter insulation
  - G - Double glazed skylight
  - H - Solarsan Solar Water Heating Unit
  - I - Heat trap baffle wall
  - J - Heat circulating fireplace flue (auxiliary heating)





# CONSERVING DESIGN

## ACTIVE SYSTEMS: One architect's experience

Residence  
Long Beach, CA  
Kaplan Lotery Boccato, Architects/Planners,  
Santa Monica  
Completion Date: 1975

spaces of this residence were developed as interlocking cubic  
modules in order to maximize the view from every room of the  
site. Built on a 30' x 100' canal site in Long Beach, this residence  
occupies the entire potential buildable site, reaches the allowable  
height, and maintains its classification as a two-story type V struc-  
ture. Every room has a deck to the view and all roofs are usable as  
additional deck space. The house maintains both horizontal and  
vertical continuity through its plan and volumetric relationships.  
Vertical and seismic loads are carried by corner supporting  
columns leaving the consistent 10 foot opening to be filled by fixed  
glass, sliding doors, or units, i.e., decks, stairs and service  
entrances. In lieu of double glazing, a solar bronze glass sun screen  
was developed to shade the interior and keep the winds from the  
west in the living room area. In order to minimize heat loss, large  
eucalyptus trees screen the remainder of the rooms from the sun.  
A north-facing glass also helps to decrease heat energy.  
The loft area is used as a passive solar collector in the winter  
when it is at the third level and only used at night. The house uses  
high-ventilation for cooling. The volume/skin ratio, plus the  
roof area/floor area ratio, helps to maximize the energy  
efficiency which maximizes glass for view.

Comparing the cubic feet of gas consumed by this residence to  
others of comparable area and in a similar temperature zone, it  
was found to be very energy efficient. With a high percentage of glass  
to floor area ratio, .77, it used only 1,068,000 cubic feet of gas  
during a twelve-month period versus five other residences which  
used from 1,864,000 cubic feet with a glass area/floor area ratio  
of .2, to 4,130,000 cubic feet with a glass area/floor area  
ratio of .40.

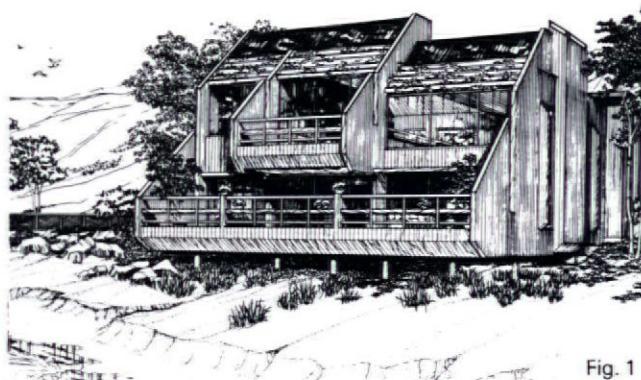
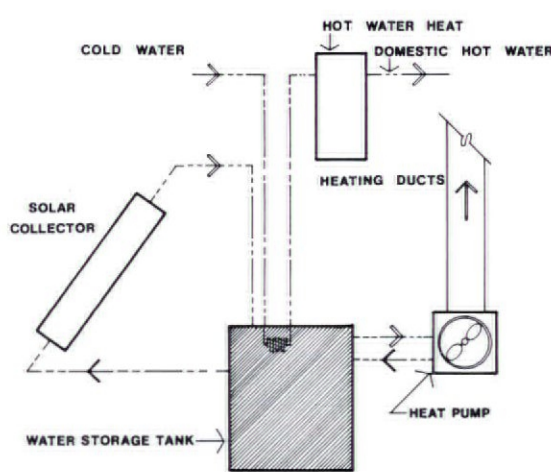


Fig. 1

I believe that we, as architects, should be taking the lead in  
producing buildings that reflect energy conservation measures.  
Twenty-five percent of all energy used in this country each year is  
for the heating and cooling of buildings. If we, as architects,  
specified proper insulation techniques, oriented our buildings so as  
to benefit from passive solar energy and used partial solar power,  
within a few years we could reduce energy use in our buildings 20-  
25%. We could reduce the entire country's energy use in excess of  
5% a year by intelligent design.

Sounds too simple...? Architects as designers of buildings have  
a tremendous effect on energy use and therefore have a social  
responsibility to set examples of proper use of natural resources.

Understanding the methods of using the sun's power in  
providing energy for buildings is where I began a few years ago.  
These studies meant going back to basics in design. For me it also  
meant understanding passive as well as active solar systems. It  
meant trying to formulate a total approach to design of buildings  
that involved all aspects of energy conservation.

My first experience with a total energy conservation design  
began in 1974 with the design of a beach house in Malibu. (Fig. 1)

The approach was theoretical: a solar energy consultant was  
hired and he prepared an energy design program. The first step  
was to integrate energy conserving design features into the house.  
Going back to the basics, the house would have heavily insulated  
walls and roof so as to reduce heat loss or gain. The second step  
was the actual design of the residence. A large south-facing  
greenhouse window glass wall was used for passive heating. Low  
ventilating windows to capture the ocean breeze and high clerestory  
windows to exhaust the hot air were incorporated. These passive  
solar techniques dictated the design of the house. The final step  
involved the design of the active solar system for space heating  
and domestic hot water heating. Flat plate solar collectors were  
integrated into the south-facing facade of the house.

Results of the analysis indicated that energy conservation  
features such as exterior insulation and double-glazing provided a  
faster payback on the original investment than the solar heating  
system, due in part to the mild coastal climate. The analysis also  
indicated that the large south-facing glass wall created a potential  
for overheating. However, ventilation by sea breezes mitigated  
this factor. A model of the house was tested on a heliodon in order  
to study the shading and the sun's penetration of the elevations  
exposed to the sun. Overhangs and trellises were adjusted to  
provide the desired solar control.

The analysis further suggested that energy conserving features  
would reduce the building loads by 40-45% and that the solar  
heating system would provide 75-80% of the remaining space and  
water heating needs. The solar system design was in the form of  
performance-type specifications on panel types. The active solar  
system was to have a gas back-up system. Details of the  
mechanical systems were to be worked out by the air conditioning  
sub-contractor. All major appliances were rated for total energy  
use, and the most efficient were specified — such as a gas range  
with spark ignitors. Due to the 1974 recession, the client postponed  
start of construction but is reactivating the project at this  
time.

The next solar project involved a retrofit; the client sought to  
incorporate a solar system into a major rebuilding of an existing  
beach house. The emphasis was on building a workable, reliable  
active solar energy system. Since it was economically unfeasible  
to convert the existing space heating system of the house, the  
system was designed to heat domestic hot water for the entire  
residence and an oversized jacuzzi.

A study was made of various solar panels on the market and,  
because of roof space constraints, a compact sun tracking collec-  
tor was used. A gas-fired boiler provided back-up to the solar  
system. The system has been in operation for over one year and  
has demonstrated apparent cost benefits.

This retrofit project, as well as another similar installation done  
concurrently, have one basic drawback. The sun tracking collector  
requires periodic maintenance of its moving parts. Although the  
collector produces the desired heating, the maintenance aspect  
poses a practical disadvantage for the average installation. (Fig. 2)

The projects described above utilize the common basic com-  
ponents of an active solar system: solar collectors, a water storage  
tank and a gas back-up system. A current solar project — now under  
construction — is a residence which replaces the water  
storage tank with a rock-filled basement area, where the rocks are  
heated by hot air circulated through the collectors and then heat is  
stored in the rocks within the basement.

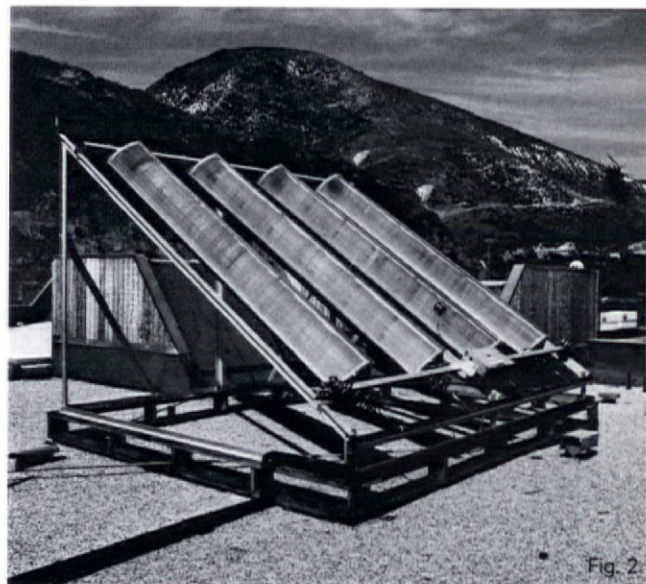


Fig. 2



Fig. 3

Our most interesting current project is thirty homes under con-  
struction in Rancho Mirage, California. (Fig. 3) The Southern  
California Edison Company has worked with the developers of this  
all-electric project and is giving the owners a rate break for  
incorporating the solar system. This project is unique in that both  
space heating and cooling along with the heating of domestic  
water are part of the total system. The components of the system  
are:

1. Flat plate roof-mounted collectors made of aluminum with  
copper water lines and glass lens.
2. A water storage tank buried in the ground for heat storage.
3. An electric powered heat pump.
4. Heating and cooling distributed through conventional duct  
systems.

The electric heat pump as a component of the solar system has  
the advantage of producing heat as well as being able to cool by  
reversing the cycle. The heat pump uses 25% of the amount of  
electricity consumed by other electric power heating devices. The  
pump also air conditions without any contribution from the solar  
system. In the heating cycle the solar system assists the heat  
pump. This total system is very efficient in the extreme hot and  
cold desert environment.

The following are conclusions I have reached from the solar  
projects I have been involved with:

1. Good passive design, such as south facing double-glazed  
glass for winter-heating, good ventilation design to cool interiors,  
and good insulation provide the basic house with reduced energy  
requirements to begin with, and combined with energy conserva-

### SOLAR ENERGY RESOURCE LIST

**National Solar Heating and Cooling Information Center,**  
toll-free number (800) 523-2929; P.O. Box 1607,  
Rockville, MD 20850.

**California Solar Information Packet,** available free from  
Publications Unit, California Energy Commission,  
1111 Howe Avenue, Sacramento, CA 95825. Inquire about  
recent publications.

**Solar Dwelling Design Concepts,** by the AIA Research Corp.,  
available from U.S. Government Printing Office, Washington,  
D.C. 20402 (HUD-PDR-156, \$2.30).

**Southern California Solar Energy Association,** 202 "C"  
Street - 11B, San Diego, CA 92101, (714) 232-3914. A non-  
profit educational organization to further awareness and  
application of solar related sciences and technologies through  
publications, meetings, workshops, and research library.

tion features such as low energy use appliances and low energy  
use lighting systems are the first steps to energy conservation.

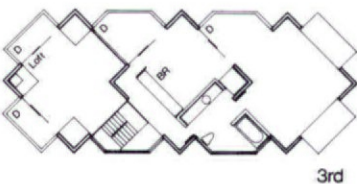
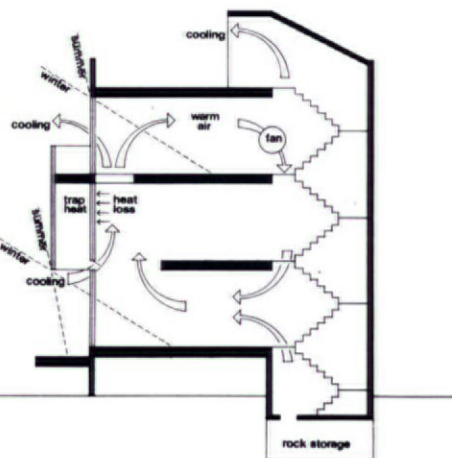
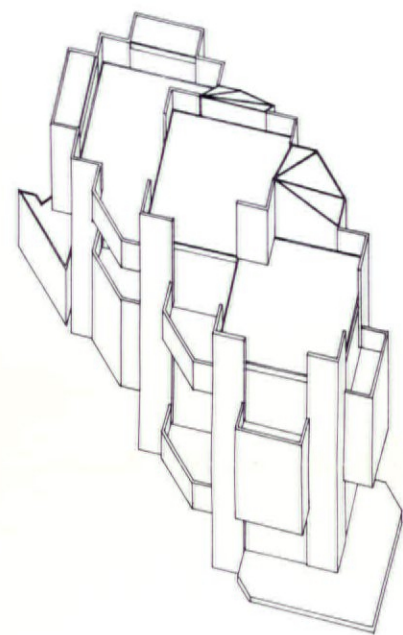
2. Solar space heating and solar heating of domestic hot water in  
the Southern California area will yield 70-80% of the heating needs  
for a residence.

3. The total system is practical and costs \$5,000 to \$8,500 for a  
3-4000 square foot single family residence. The State of California  
now gives a tax credit of \$3,000 for solar systems, which con-  
siderably reduces the initial cost of the system.

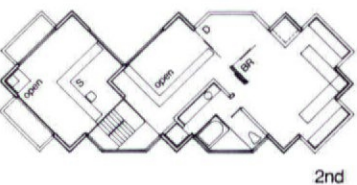
4. Electric back-up systems seem to have the edge over gas on  
the power source aspect, since gas appears to be a limited  
resource with high anticipated future costs. Electric-powered heat  
pumps generate space cooling benefits at low cost with low  
energy consumption.

The future of our energy needs in buildings lies in practical  
development of the solar cell. Solar cells, made of silicon, have no  
moving parts and require no maintenance. They generate electric  
power which can be stored within batteries. Solar cells will  
eventually make buildings totally self-sufficient in energy use.  
Requiring no outside source of power, the solar cell will heat and  
cool buildings as well as provide power for lighting  
systems...widespread implementation of such systems could  
reduce our nation's energy use by 25%. Architects should lobby  
for federal support of solar cell development. It is in areas such as  
this that we, as architects, can assume leadership in energy  
conservation.

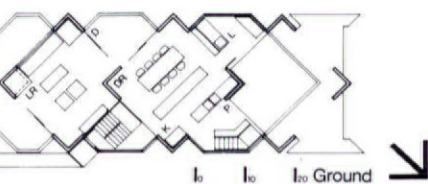
Michael E. Barsocchini, AIA



3rd



2nd



1st Ground



# ENERGY, GLASS, AND THE SCHEIMER RESIDENCE: Is the Neutra Idea Surviving?

Some 30-odd years ago, Richard Neutra invented the phrase "Biorealism" to denote a realism in design related to the basic needs of the human being as opposed to "dollar and cents" or "square foot" realism. In those years, he found it extremely difficult to motivate the spending of an extra dollar for human comfort since there was no scientific basis to prove that some of the amenities we were trying to incorporate in our designs were "worth it."

How much progress has been made during the last generation in motivating the decision for "spending of a buck" for human comfort or satisfaction? While construction costs have doubled and trebled, and, to be sure, the standard of luxury has tended to go upward, there seems to have been very little forward motion to defend these decisions scientifically. For as long as I can remember, our criteria for "functionalism" in a structure housing the human being has been "How well does the human being function within it?" Unfortunately this definition is still quite foreign to most persons when they think of functionalism.

Over the years of our practice, now celebrating its fiftieth anniversary, it has become increasingly clear to us that having come from a heritage of living with nature for the past million years, Man will not easily be transplanted into a barren, static and sterile environment within a mere 5,000 years. We have therefore tried to develop an architecture which does everything to dissolve the line between indoors and outdoors, places Man in relationship to nature by every means at our disposal, and makes as free use as possible of nature's materials of sunlight, water, and greenery. That this is a universal need, appreciated the world around, seems documented by the fact that we have carried out structures following this philosophy in four out of five continents in the harshest of climates using double-glazing, snow melting systems, and other technological devices to mitigate the effects of climate. Glass seems to be the single most important technological development which allows

Man to be housed in a manner he has come to expect, and yet to participate in the dynamic on-going drama of nature!

There have been various pressures, traditionally, which come to bear against the use of large glass areas. Originally there were technological limitations on the sizes of glass which could be manufactured, transported or handled. Later the sizes of the sheets had to do with code-imposed limitations and technical installation problems. More recently concerns regarding increased vandalism and outright attack against buildings, security, and related concerns have come to the fore.

And now we have a new crisis called THE ENERGY CRISIS. As has happened so often in the past, when a short-term problem appears on the scene, we react violently. In fact we over-react. New laws and ordinances have now been passed sharply restricting the area of openings permissible expressed as a percentage of the total floor area (in most cases). The cost of our remaining energy will be sharply increased, further exerting pressure. I term the Energy Crisis a "short-term" effect. Estimates of the oil and petro reserves vary (depending on usage) from 30 to 50 years. We are supposedly engaged in an all-out effort to become energy independent within the next decade. It is obvious that alternative sources must be found which will largely supplant our oil-based system within the next century. In other words, the present "crisis" is but a wink of an eyelash compared to Man's total history, the last 5,000 years, or even the life of the structure we design today. While it is true that heat loss and gain through glazed areas is a multiple of that through solid walls, is anyone attempting to equate the impact on human beings that these ordinances will produce?

Taken to its ultimate extreme, given the current emphasis on reduction of exposure as a means of cutting energy consumption, we should build nothing but underground bunkers with zero exposure to the outside air which would

theoretically require the least energy to maintain at a uniform temperature. (In practice this turns out not to be the case, but it is difficult and arduous to prove). Since hearing of the move to design restrictive ordinances affecting the physical design of our structures, I have been grasping for a way to express my concern.

First, it seems to me, it is necessary to differentiate between elements of our environment which through their visual and functional qualities embody drastic changes in the features to which we have been accustomed as opposed to those elements which are more transitory and have little or no physical impact, in a literal sense, on our lives. The physical design of automobiles, for example, is less serious than the design of buildings, since the average automobile has depreciated in three years and most often is junked within ten. Thus if a "bad decision" is made regarding the design of a new automobile, it at least is not with us for an indefinite time. The same can be said about industrial processes, the setting of speed limits, energy management in existing buildings, peak pricing, and a host of other strategies available to the energy planners.

Compare, for example, arriving at an "Energy Budget" which would be based on some kind of established "norm" and which would be available to every family at some base rate. Any energy spent beyond this would be priced at a premium. People would be encouraged to conserve in order to "stay within" the lowest block and would be prepared to "pay the price" for exceeding it. Those who feel greater exposure to nature is necessary for health could elect to pay for it in preference to vitamin pills or belonging to a country club, for example.

The year 1984 is not far away. Energy management through repressive ordinances affecting our physical environment appears to me to be tampering with our basic freedom of choice, if not with our health. No one has any statistics to really prove how Man will suffer if cut off from nature, but hardly a



day passes when we do not read of some new scourge which has been visited upon the human race by reckless experimentation with drugs, pesticides, pollution of various kinds, and other degradation of the environment which in turn has lethal effects on Man. At the risk of sounding unpopular during this national effort to conserve, I suggest that before we rush headlong into the construction of a simplistic generation of structures to serve Man with minimal window areas in the name of Energy Conservation, we should pause to check whether Man will be able to survive in the cheerless environments we are prescribing for him. Or, at the very least, we should allow for those who are willing to pay for the privilege of using a bit more energy if that be the price they must pay to be close to nature.

In our design for survival, we must maintain a balance between the need to recognize the end of the era of affluence and our excesses. We must also bear in mind that our obvious goal in all of this effort is to create an environment in which it is worthwhile for Man to survive and recognize that there are potential hazards which should be kept in mind in deciding what the lower threshold of acceptability might be.

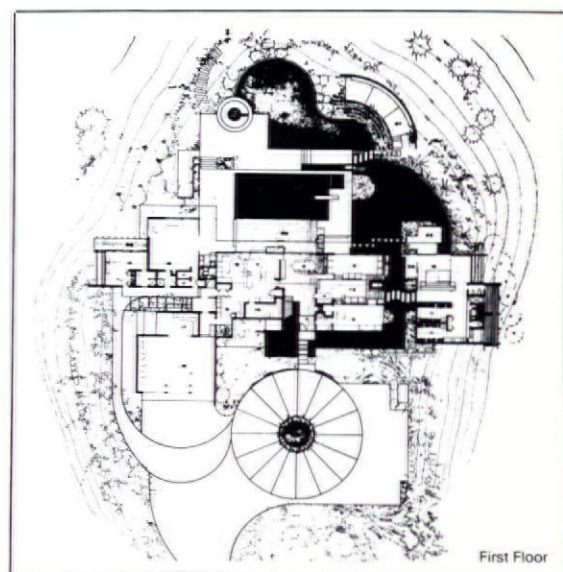
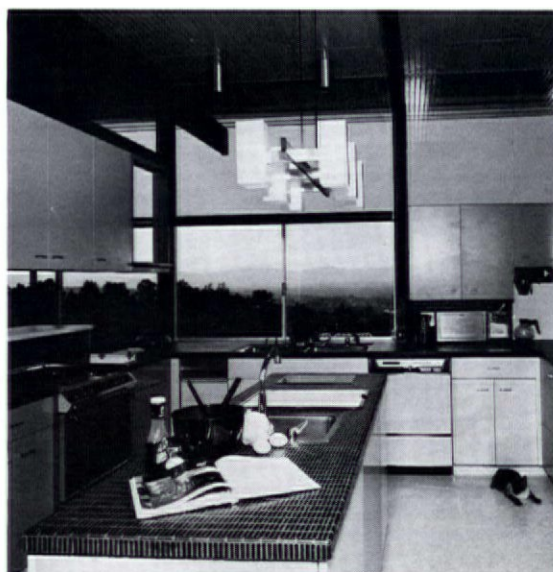
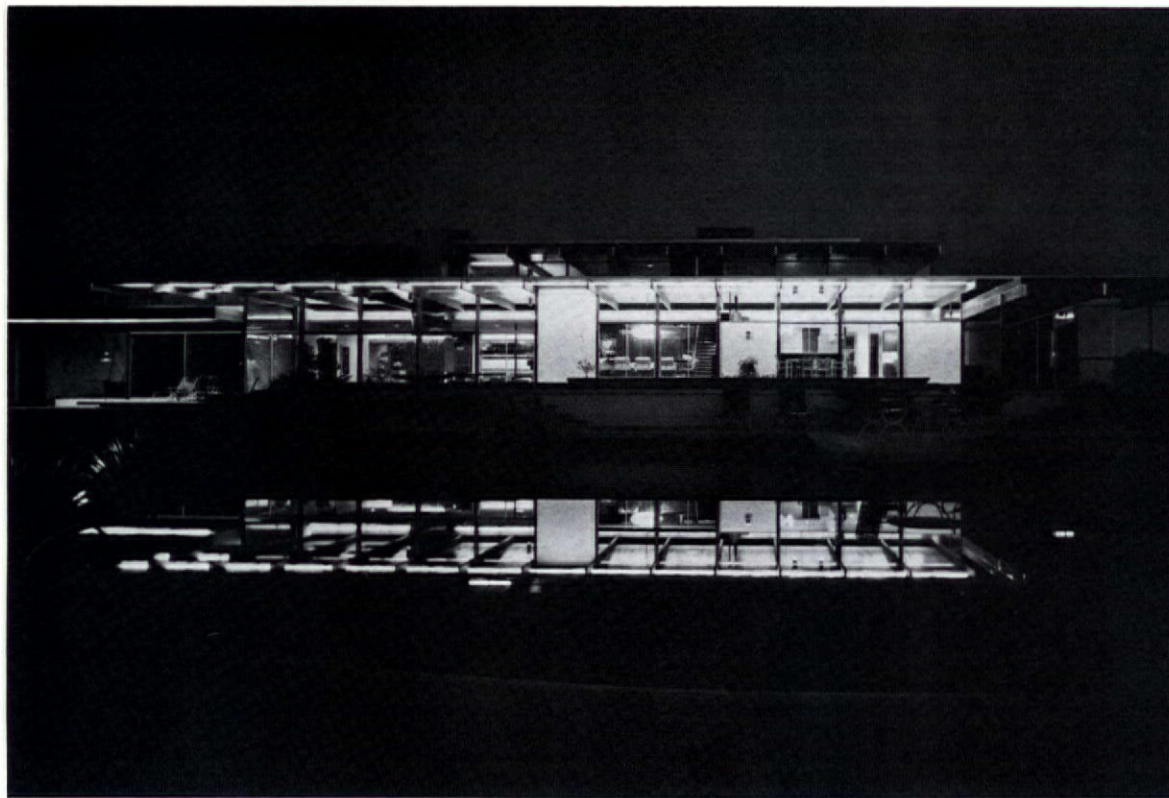
Although the residence pictured here was commissioned during Richard Neutra's life, it represents the first major residential project exclusively conceived and carried out by me alone. It continues and further develops the Neutra tradition of development of prototypical ideas to bring man to closer contact to nature. Like Richard Neutra's Health House of 1929, and later his houses for Kaufmann and Tremaine of the '40s, the Scheimer House, completed in 1973, continues to explore refinements of ideas suggested by those earlier designs.

In sharp contrast to today's tendency to reduce Man to the role of mole in the name of energy conservation, we have long sounded a concern for a rational

basis of "trade offs" to determine the relative importance of reduced glass areas and fuel bills as opposed to man's physical well-being and medical bills. The Scheimer House carries these ideas to new heights — namely the creation of a "dynamic" interior environment more reminiscent of living with nature itself, in contrast to the classical "static" perfection of optimum temperature, lighting, and other conditions within building interiors.

My theory is that Man — having been exposed to a natural habitat for one million years — has never properly adapted to a static interior environment, and this may be responsible for many of his ills. We therefore advocate any means available to create the "changes," also in the interior, which can stimulate and refresh Man during the times he is under roof. Water, daylighting, and plants are materials we have used in ever-increasing intensity during the years. The Scheimer Residence represents the culmination of this tendency, with water on six different levels including all available roofs, sky-lighting, interior gardens, a waterfall and flowing stream through the interior of the house — the greatest possible contact between interior and exterior.

Dion Neutra, AIA



First Floor



# PERSPECTIVE

(continued from front page)

home town of Culver City and my current neighborhood in Palms are both lumped under the heading of "Baldwin Hills." And the system of number-and-letter codes is so arbitrary as to be utterly baffling; my Westwood office falls within LA-15a, but that blind code revealed nothing about the location of the neighborhood or the function of the map system until after I back-tracked through an overgeneralized map of the L.A. basin.

Still, these complaints may seem a bit cranky and over-demanding when we consider the awesome challenge of subdividing Southern California into any rational scheme. Marc Treib, who is credited with the design of the *Guide* (as well as its companion volume from Peregrine Smith, *A Guide to Architecture in San Francisco & Northern California*), has done a worthy job of producing a clean, stylish and functional handbook out of a chaotic mix of elements. And we can forgive the authors for devoting separate sections to their own communities, Pasadena and Santa Barbara, while lumping dozens of other towns and suburbs under the bland heading of "Southern California."

In the end, it's the clear vision and unwavering self-assurance of the authors that makes the new *Guide* into something far more than a compilation of interesting buildings. Gebhard and Winter express their well-informed opinions of Southern California architecture in a variety of subtle ways: by their selections and omissions, by their conceits and satire, by their well-chosen words of description.

And sometimes the value judgment is conveyed with mute but unmistakable symbolism. The long introductory essay, which stands on its own as a statement of our architectural past and our environmental future, is punctuated with a series of seemingly unrelated photographs — houses, office buildings, commercial developments. We wonder what these images are intended to illustrate — and then we finally notice that each photograph carries the same one-word caption: *Destroyed*. What Gebhard and Winter have given us in their new *Guide* is the hope that Southern California will acquire a new reverence for its own architectural achievement.



## WOODEN BUILDINGS, PART ONE

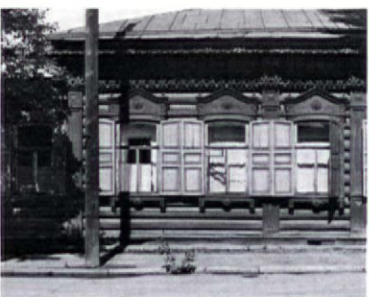
By Frederic P. Lyman, AIA

On the banks of the river Angara not far from Lake Baikal lies the city of Irkutsk.

Many rivers flow into the Lake but only the Angara flows out. Near her source she is adorned with a large stone which is said by the Guide Tania, with the countenance of Angara in the depth of her eyes and the waves of her hair, to have been hurled by Old Man Baikal in fury or perhaps in an unsuccessful attempt to prevent his beautiful daughter from running off with the handsome Yenisey.

Irkutsk is known in the old and the new capitals far to the west as the final resting place of the exiled Decembrists, who made a naive attempt in 1825 to establish a bourgeois republic, and for the special beauty of its wooden houses, log cabins like those of the American pioneers but with their joints and sometimes even the logs themselves concealed behind carved pilasters, wainscots, and window casings.

To an American Architect the houses seemed similar to those that lie across the whole of the North of the Union, but their beauty he did not question and peering with the aggressive presumption of any American tourist through broad frames, waving glass, and lace curtains, his boorish glance caught the familiar shape of a draughting board and so, of course, he knocked on the door and was politely ushered in and there sixty-three hundred miles and over the pole from Charlottesville, not a man among them except their uninvited visitor, and speaking not a word of English except the univocal name of Architect, with the tender if hesitant smile of geographical strangers but professional comrades, glad to see you if fearful of a long interruption, he found a covey of Jeffersonians clinging to their tidy ancient draughting room with nothing to draw but ding-bat apartments.



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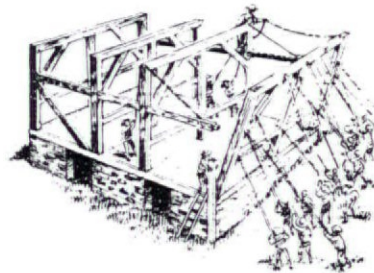
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# CHAPTER NEWS AND NOTES

**The 2,138th meeting of the SCC/AIA Board of Directors:** On October 4, 1977, officers, directors and guests gathered at the Chapter office to hear reports by the following: **Stan Smith**, Chairperson of the Committee on County Agencies, reported that the County wants to keep as much architectural work as possible in-house and will approach the private sector only if work-load justifies it. President **David Martin** reported on CCAIA matters, including the continuing education proposal which appears to be in a holding pattern; also, he announced that contributions from other Chapters are forthcoming to help finance and distribute the Santa Monica Mountains Study in *L.A. ARCHITECT*. Director **Joseph Amestoy** recommended the Chapter develop a position on the restructuring of the Public Works Department; he also recommended the formation of a committee, similar to the Cultural Heritage Committee, to assist and advise the Municipal Arts Commission — this, in response to a request by a Municipal Arts Commissioner. **Margaret Bach**, *L.A. ARCHITECT* Editor, was introduced to the Board. WAL President **Kathy Brent** reported on the WAL Home Tour. **Margot Siegel** reported on proposed Chapter By-Laws changes.

## WAL

- WAL is happy to announce that its recent 17th Annual Home Tour was an unqualified success. Our thanks to the dedicated volunteer workers — organizers, coordinators, mailing and telephone committees, hostesses, hosts, ticket sellers, etc. Thanks also to the owners and the architects of our Tour homes, to SCC/AIA and its office staff, and to the media, for their needed and much appreciated cooperation. Last but not least, thanks to all the subscribers for their most gratifying interest and support.
- **Kathy Brent** and **Sally Landworth** served as delegates to the CCWAL Annual Meeting, held in conjunction with the CCAIA Convention in Monterey last month.
- Surprise entertainment will be featured at WAL's Holiday Party, scheduled for Wednesday evening, December 14th. For further details and reservations, call **Maureen Dodson**, 454-7403.
- As part of its community service activities, WAL participated in Los Angeles Girls' Week by escorting a group of architectural school aspirants on a tour of the **Welton Becket & Associates'** office, followed by lunch and a meeting with USC Department of Architecture counselors.

The current best-selling *Book of Lists* states that speaking before a group is the worst of all human fears. The SCC/AIA Toastmasters hold productive bimonthly meetings to learn how to overcome this fear, to learn how to speak eloquently, and to improve verbal communication skills. For membership and meeting information, please contact **Keith Randall** at 655-7220 or 241-6403.

## ASSOCIATES

Special thanks are in order to the outgoing officers of the Associates. Co-chairpersons **A. Jeffrey Skorneck** and **Susan Peterson** have completed a successful year representing Associate Members to the Corporate Board and overseeing all Associate activities. With the help of Treasurer **Gail Babnew**, Director of Licensing Seminars **Michael Rachlin**, Secretary **Brent Wolfe** and Director of Communications **Ben Ericson**, the Associate Board has organized and directed new and established programs for the past year.

Among the outstanding programs were: the ten Qualifying Exam and the four Professional Exam Seminars; the implementation of the popular Associate Newsletter and Calendar; the new Associate/Associates programs for professional development; a well-motivated Associate Roster mailing; the hosting for the Stanley Tigerman Chapter meeting; participation in important Corporate committees such as the By-laws and Continuing Education Committees; the Schindler Kings Road/Hollywood Bowl Extravaganza; and, an organized election of 1978 officers.

Also, thanks are due to some extraordinary Associate Members and friends: **Ken Newman**, **Fran Offenhauser**, **John Hekhuis**, **John Poindexter**, **Robert Reyes**, and **Joanna Karatzas**.

On December 20 a special champagne Associate Board Meeting will be held at Ken Newman's house, 338 S. Wilton Place at 7:30 p.m. to celebrate the old and new Associate officers. The first business meeting of the new board will be January 11 at Michael Rachlin's and Brent Wolfe's studio, 10312 Seabury Lane, Beverly Glen, at 7:30 p.m. Special guest for this meeting will be *L.A. ARCHITECT* Editor **Margaret Bach**. All Associate Board meetings are open to interested persons.

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The 1978 Installation of Officers for the Southern California Chapter/AIA and the Women's Architectural League, will take place Saturday, January 21, 1978 at the Biltmore Hotel in downtown Los Angeles. **Thornton Abell**, FAIA, will be installed as Chapter President and **Sally Landworth** will be installed as President of the Women's Architectural League. In place of the formal, sit-down dinner, the event will feature a cocktail-buffet, with dancing and a no-host bar. The buffet will be from 6:30 p.m. to 8:30 p.m. The installation ceremonies will begin at 8:45 with **A. Quincy Jones**, FAIA, serving as installing officer. Invitations to the installation will be mailed to members in December.

The Annual Installation of Officers of the San Fernando Valley Section of the SCC/AIA will take place on Saturday, January 7, 1978 at the Braemar Country Club in Tarzana. Call **Peter Creamer**, 990-1156, for further information.

A festive Christmas party and bazaar, staged in a turn-of-the-century atmosphere, will provide fun and entertainment for the whole family when the 7th Annual Christmas at Heritage Square is celebrated Sunday, December 11, 11:30 a.m. to 4:30 p.m. The event is co-sponsored by the Cultural Heritage Board of the City of Los Angeles and the Cultural Heritage Foundation, a non-profit corporation dedicated to historic preservation.

## L.A. ARCHITECT

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## ASA

**Mrs. Carol D. Cushing** was elected president of the Southern California Chapter, Architectural Secretaries Association, Inc. at their annual business meeting on November 15 held at the offices of Maxwell Starkman, AIA & Associates. Mrs. Cushing is Personnel Manager and Business Development Coordinator of the Los Angeles office of Adrian Wilson Associates/a division of Howard Needles Tammen & Bergendoff (HNTB). She will be installed in January and take office beginning February 1. Her newly elected board will include: 1st Vice President/Programs - **Mrs. Kathi Majadli**, Cost Estimator for Charles Kober Associates; 2nd Vice President/Membership - **Ms. Rose Marie Baker**, Office Administrator for Pulliam, Matthews & Associates, AIA; Recording Secretary - **Mrs. Barbara Marshall**, office manager for Lunden & Johnson, Architects; Corresponding Secretary - **Miss Helen Fluhrer**, Administrative Secretary of the Southern California Chapter, American Institute of Architects; Treasurer (2nd term) - **Mrs. Sandy Nelson**, Billing Supervisor for Charles Kober

Associates. Directors will be: **Mrs. Beverly Bolin**, outgoing chapter president (executive secretary for Adrian Wilson Associates/HNTB); **Miss Lily Nakao**, executive secretary for Charles Kober Associates; and **Miss Thelma Im-schweiler**, office administrator for Alie Design, Inc.

Friday, December 16 has been set for the annual Christmas dinner party for members and their invited guests at the home of member **Barbara Marshall**. Contact Mrs. Cushing, this year's 1st vice president/programs, for details and reservations at 621 South Westmoreland Avenue, Los Angeles, CA 90005, (213) 386-7070, during office hours.

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